

# Stanford

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## Alex Bien

Accel System Operator I, SLAC National Accelerator Laboratory

 Curriculum Vitae available Online

### Bio

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#### BIO

I am a 2022 graduate with a B.S. in physics from the University of Maryland at College Park, and I currently operate the world's longest and most powerful linear particle accelerator administrated by Stanford University under the direction of the US Department of Energy. Here I interface directly with the machinery, controls, and safety systems for three linear accelerator facilities: FACET-II where electron-pair beams are shot thru hot plasma to study novel wakefield acceleration techniques, LCLS where coherent x-rays of very high energy (and inversely low wavelength) probe deep into matter for imaging at atomic scales, and LCLS-II where commissioning is underway to produce a much more powerful megahertz rep rate superconducting beam that can leverage the same XFEL mechanism to (instead of just taking snapshots) also resolve the dynamics of chemical reactions in situ.

#### EDUCATION AND CERTIFICATIONS

- Bachelor of Science, University of Maryland, College Park , Physics (2022)

#### LINKS

- GitHub: <https://code.stanford.edu/abien>

### Professional

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#### WORK EXPERIENCE

- Research Assistant - Laboratory for Physical Sciences • LPS Qubit Collaboratory (November 2020 - July 2022)
- SULI Researcher - SLAC National Accelerator Laboratory • Stanford University (June 2021 - August 2021)
- PREP Researcher - National Institute of Standards and Technology (NIST) (March 2019 - August 2020)
- SPD Researcher - University of Maryland - First Year Innovation and Research Experience (FIRE) (August 2019 - December 2019)